

WHAT IS CLAIMED IS:

1. A bipolar multi electrostatic inducing discharge-dissipation lightning air terminal for preventing a thunderbolt from falling onto an upper portion of a fixing member fixedly installed on a construction to be protected and having a lightning conductor connected to an earth electrode grounded to an earth, the bipolar multi electrostatic inducing discharge-dissipation lightning air terminal comprising:
 - a fixing bar vertically installed at an upper surface of the fixing member;
 - an electrostatic induction member, which is provided at an upper portion of the
- 5 fixing bar and upper and lower sections of which are charged with different charges based on an electric double layer theory and an electric dipolar action caused by an electrostatic induction in order to dissipate and discharge an earth-charge into an atmospheric space as a thundercloud approaches, the electrostatic induction member including an isolation polymer insulator provided at the upper portion of the
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- 15 fixing bar for increasing an insulation distance, an auxiliary discharging member, which has at least one thin plate to be stacked and through a center of which a lower end part of the isolation polymer insulator passes, a preliminarily discharging cap member made of conductive material and positioned at a lower surface of the auxiliary discharging member, and a preliminarily discharging member fixed to the
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- 25 fixing bar in such a manner that the preliminarily discharging member maintains a non-contact state with respect to a lower surface of the auxiliary discharging member; and
 - a cap member detachably coupled to a free end of the fixing bar for pressing an upper portion of the electrostatic induction member and for discharging the earth-charge as the thundercloud approaches.

2. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 1, wherein a plurality of electrostatic induction members are stacked at the upper portion of the fixing bar.

5 3. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 2, wherein a preliminarily discharging brush member is positioned between a preliminarily discharging cap member and a preliminarily discharging member so as to facilitate a preliminary discharge as the thundercloud approaches, the preliminarily discharging brush member having a plurality of fins at a 10 circumferential portion thereof and being formed at a center thereof with a disc-type fixing plate having a perforation hole for receiving the fixing bar.

4. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 1, wherein a protective member is rested on an upper 15 surface of the auxiliary discharging member so as to prevent the auxiliary discharging member from being damaged by external impact.

5. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 1, wherein the isolation polymer insulator has a cylindrical 20 shape and is formed at a center thereof with a perforation hole for receiving the fixing bar, upper and lower extension pieces, which are spaced from each other by a predetermined distance, are formed at an outer peripheral portion of the isolation polymer insulator, and the lower extension piece is positioned at an approximately middle portion of the isolation polymer insulator such that an insertion part for 25 sequentially receiving the protective member, the auxiliary discharging member, and the preliminarily discharging cap member is formed at an end of the isolation polymer

insulator.

6. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 5, wherein the auxiliary discharging member has a circular plate shape and is formed at a center thereof with a horizontal surface having an insertion hole for receiving the insertion part of the isolation polymer insulator and formed at a peripheral portion thereof with an inclined surface, which is inclined downwardly outward from the horizontal surface and formed at an outer circumferential portion thereof with a corrugated section for preventing stacked auxiliary discharging members from being rotated.

7. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 1, wherein the preliminarily discharging member has a disc shape and is formed at a lower surface thereof with a protrusion, the preliminarily discharging member has a perforation hole at a center thereof for receiving the fixing bar and a fixing screw hole formed at a sidewall of the protrusion in communication with the perforation hole in order to fixedly press an outer peripheral portion of the fixing bar by using a screw member screw-coupled into the fixing screw hole.

8. The bipolar multi electrostatic inducing discharge-dissipation lightning air terminal as claimed in claim 1, wherein an insulation material layer including epoxy resin is coated on one surface or both surfaces of the auxiliary discharging member to increase capacitance.